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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/023,642

12/21/2001

Timothy Harris Kuhl

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6347

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10/26/2005

BLAKE, CASSELS & GRAYDON LLP
BOX 25, COMMERCE COURT WEST
199 BAY STREET, SUITE 2800
TORONTO, ON M5L 1A9
CANADA

EXAMINER

PEZZLO, JOHN

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 10/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,642

Applicant(s)

KUHLE ET AL.

Examiner

John Pezzlo

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-14, 17 and 18 is/are rejected.
- 7) ☐ Claim(s) 7, 8, 15 and 16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

I. Claims 1-6, 9-14, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duffy et al. (US 2002/0199203 A1) hereinafter Duffy in view of Fan et al. (US 6,324,165 B1) hereinafter Fan.

1. Regarding claims 1, 9, and 17 – Duffy discloses a gateway router for interfacing an ATM network and an Internet network and Duffy discloses PVC's which, utilize service classes (real time and non real time) and QoS (CBR and VBR) for classifying different types of traffic for forwarding ATM cells between networks, refer to Figure 1 and page 3 paragraph [0026] and page 5 paragraph [0047] and table on page 7 and page 7 paragraphs [0076], [0084], [0085], and [0086].

Duffy does not expressly disclose (i) identifying for said cell an egress queue family by utilizing a first set of parameters from said set of transmission parameters, (ii) associating with said cell one of a predefined number of egress class of service (COS) levels by mapping a second

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set of parameters from said set of transmission parameters into one of said egress COS levels, (iii) utilizing said egress COS level associated with said cell to select an egress queue member of said egress queue family identified in step (i), said selected egress queue member being associated with said egress COS level associated with said cell in step (ii).

Fan teaches (i) identifying for said cell an egress queue family by utilizing a first set of parameters from said set of transmission parameters, (ii) associating with said cell one of a predefined number of egress class of service (COS) levels by mapping a second set of parameters from said set of transmission parameters into one of said egress COS levels, (iii) utilizing said egress COS level associated with said cell to select an egress queue member of said egress queue family identified in step (i), said selected egress queue member being associated with said egress COS level associated with said cell in step (ii), refer to Figures 2b and 2c and column 1 lines 49 to 67 and column 2 lines 1 to 37 and column 3 lines 14 to 26 and column 6 lines 1 to 55.

At the time of the invention, it would have been obvious to an ordinary person of skill in the art to combine Duffy with Fan to provide (i) identifying for said cell an egress queue family by utilizing a first set of parameters from said set of transmission parameters, (ii) associating with said cell one of a predefined number of egress class of service (COS) levels by mapping a second set of parameters from said set of transmission parameters into one of said egress COS levels, (iii) utilizing said egress COS level associated with said cell to select an egress queue member of said egress queue family identified in step (i), said selected egress queue member being associated with said egress COS level associated with said cell in step (ii). The suggestion/motivation for doing so would have been that Duffy discloses interworking between

an ATM network and IP network and utilizing service classes and QoS for transferring ATM cells, Duffy does not disclose the details of utilizing buffers and for the transfers which are taught by Fan. The benefit being that the customer will receive the best service and ATM real time cells will have priority and experience a minimum of delay while being transferred from source to destination across the networks.

Duffy discloses (iv) providing said cell to said identified queue member for forwarding to said another network, refer to Figure 1 and page 3 paragraph [0026] and page 5 paragraph [0047] and table on page 7 and page 7 paragraphs [0076], [0084], [0085], and [0086].

2. Regarding claims 2 and 10 – Duffy discloses said first set of parameters comprises a real-time connection indication and a resource reserved indication (CBR and VBR), refer to Figure 1 and page 3 paragraph [0026] and page 5 paragraph [0047] and table on page 7 and page 7 paragraphs [0076], [0084], [0085], and [0086].

3. Regarding claims 3 and 11 – Duffy discloses said second set of parameters comprises at least an ATM quality of service parameter and a service category parameter, refer to Figure 1 and page 3 paragraph [0026] and page 5 paragraph [0047] and table on page 7 and page 7 paragraphs [0076], [0084], [0085], and [0086].

4. Regarding claims 4 and 12 - Duffy does not expressly disclose said second set of parameters, said ATM quality of service parameters comprise a cell loss ratio parameter and a cell delay variation parameter.

Fan teaches said second set of parameters, said ATM quality of service parameters comprise a cell loss ratio parameter and a cell delay variation parameter, refer to Figures 2b and 2c and column 1 lines 49 to 67 and column 2 lines 1 to 37.

At the time of the invention, it would have been obvious to an ordinary person of skill in the art to combine Duffy with Fan to provide said second set of parameters, said ATM quality of service parameters comprise a cell loss ratio parameter and a cell delay variation parameter. The suggestion/motivation for doing so would have been that Duffy discloses interworking between an ATM network and IP network and utilizing service classes and QoS for transferring ATM cells, Duffy does not disclose the details of utilizing buffers and for the transfers which are taught by Fan. The benefit being that the customer will receive the best service and ATM real time cells will have priority and experience a minimum of delay while being transferred from source to destination across the networks.

5. Regarding claims 5 and 13 – Duffy does not expressly disclose said egress queue family in step (i) is one of a real-time (R-T) queue family, a resources reserved (RR) queue family, and a non-resources reserved (nRR) queue family.

Fan teaches said egress queue family in step (i) is one of a real-time (R-T) queue family, a resources reserved (RR) queue family, and a non-resources reserved (nRR) queue family, refer to Figures 2b and 2c and column 1 lines 49 to 67 and column 2 lines 1 to 37 and column 3 lines 14 to 26 and column 6 lines 1 to 55.

At the time of the invention, it would have been obvious to an ordinary person of skill in the art to combine Duffy with Fan to provide said egress queue family in step (i) is one of a real-

time (R-T) queue family, a resources reserved (RR) queue family, and a non-resources reserved (nRR) queue family. The suggestion/motivation for doing so would have been that Duffy discloses interworking between an ATM network and IP network and utilizing service classes and QoS for transferring ATM cells, Duffy does not disclose the details of utilizing buffers and for the transfers which are taught by Fan. The benefit being that the customer will receive the best service and ATM real time cells will have priority and experience a minimum of delay while being transferred from source to destination across the networks.

6. Regarding claims 6 and 14 – Duffy discloses a single R-T queue member having a predefined minimum bandwidth, refer to Figure 1 and page 3 paragraph [0026] and page 5 paragraph [0047] and table on page 7 and page 7 paragraphs [0076], [0084], [0085], and [0086].

7. Regarding claims 18 – Duffy does not expressly disclose MPLS, IP and ATM mediation traffic flows co-exist at said mediation connection, and each of said MPLS, IP and ATM mediation traffic flows are associated with one of said egress queue types, and one of said egress COS levels.

Fan teaches MPLS, IP and ATM mediation traffic flows co-exist at said mediation connection, and each of said MPLS, IP and ATM mediation traffic flows are associated with one of said egress queue types, and one of said egress COS levels, refer to Figures 2b and 2c and column 1 lines 49 to 67 and column 2 lines 1 to 37 and column 3 lines 14 to 26 and column 6 lines 1 to 55.

At the time of the invention, it would have been obvious to an ordinary person of skill in the art to combine Duffy with Fan to provide MPLS, IP and ATM mediation traffic flows co-exist at said mediation connection, and each of said MPLS, IP and ATM mediation traffic flows are associated with one of said egress queue types, and one of said egress COS levels. The suggestion/motivation for doing so would have been that Duffy discloses interworking between an ATM network and IP network and utilizing service classes and QoS for transferring ATM cells, Duffy does not disclose the details of utilizing buffers and for the transfers which are taught by Fan. The benefit being that the customer will receive the best service and ATM real time cells will have priority and experience a minimum of delay while being transferred from source to destination across the networks.

Allowable Subject Matter

Claims 7, 8, 15, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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1. Wang et al. (US 6,775,268 B1) discloses a method and system for mapping packet service categories to ADSL latency paths.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Pezzlo whose telephone number is (571) 272-3090. The examiner can normally be reached on Monday to Friday from 8:30 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C.

or faxed to:

(571) 273-8300

For informal or draft communications, please label "PROPOSED" or "DRAFT"

Hand delivered responses should be brought to:

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Alexandria, VA, 22313.

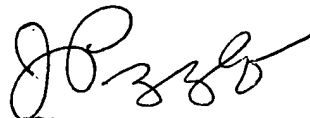
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John Pezzlo

21 October 2005



JOHN PEZZLO
PRIMARY EXAMINER